

ABSTRACT

METHOD OF AND APPARATUS FOR REDUCING FREQUENCY ERRORS ASSOCIATED WITH AN INTER-SYSTEM SCAN

A plural-mode receiver 10 is able to receive signals from a first communication system (e.g. WCDMA) or signals from a second, different communication system e.g. GSM). The receiver 10 comprises a first receiver chain 13, 15, 17, 19 for receiving signals of the first communication system and a second receiver chain 12, 14, 16, 18 for receiving signals of the second communication system. A reference oscillator 24 is arranged to generate a reference signal for the first receiver chain and the second receiver chain. The receiver also comprises a controller 22 for controlling the reference oscillator 24 so that the oscillator 24 oscillates at frequencies related to signals of the first communication system or signals of the second communication system. The controller 22 records the change in frequency of the oscillator 24 resulting from changing to the frequencies related to signals of the second communication system and a period of time during which signals of the second communication system are received by the second receiver chain. The controller 22 then calculates from the recorded change and the recorded period of time an error vector and changes parameters of the reference oscillator 24, including applying the calculated error vector, so that the oscillator oscillates at frequencies related to signals of the first communication system.